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This docket Index (A-97-50) is current as of 04/01/99

MASTER INDEX: DOCKET A-97-50

CONTROL OF EMISSIONS OF AIR POLLUTION FROM NEW MARINE ENGINES AT OR ABOVE 37kW ANPRM

Subject Matter

- I. Notice of Intent or ANPRM, if any
- II. Items Considered in Developing Proposal
- III. Proposal
- IV. Additional Items Considered After Proposal in Developing Final Rule
- V. Final Action

Subcategory II-A: EPA Studies or Contractor Reports

<u>Document</u> <u>Number</u>	Date Rcvd in Docket	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
II-A-01	11-12-98	"Commercial Marine Emissions Inventory for EPA Category 2 & 3 Compression Ignition Marine Engines in U.S. Continental & Inland Waterways," prepared by Carnegie Mellon University	8-21-98
II-A-02	11-25-98	"Incremental Cost Estimates for Marine Diesel Engine Technology Improvements," prepared by Arcadis Geraghty & Miller, contract 68-C5-0010	9-30-98
II-A-03	11-25-98	"Industry Characterization: Commercial Marine Vessel Manufacturers," prepared by ICF, contract 68-C5-0010	9-98
II-A-04	11-25-98	"Characterization & Small Business Impact Assessment for Small & Large Marine Compression Ignition Engine Manufacturers/Marinizers," prepared by ICF, contract 68-C5-0010	9-98
II-A-05	12-10-98	"Commercial Marine Vessel Contributions to Emission Inventories," Final Report prepared by Booz-Allen & Hamilton, Inc., for EPA	10-7-91

Category II-B: EPA Factual Memoranda

<u>Document</u> <u>Number</u>	Date Rcvd in Docket	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
II-B-01	10-9-98	J. Revelt, EPA, submitting paperwork re International Maritime Organization (IMO), International Convention for Prevention of Pollution from Ships (MARPOL 73/78), Annex VI and NOx Technical Code	2-12-98
II-B-02	10-9-98	M. Wolcott to C. Gray, EPA, re Ambient Temperatures Associated with High Ozone Concentrations	9-6-84
II-B-03	11-25-98	Heavy-Duty Diesel Engines Controlled by Onboard Computers: Guidance on Reporting & Evaluating Auxiliary Emission Control Devices & Defeat Device Prohibition of Clean Air Act	10-15-98
II-B-04	11-25-98	J. Revelt, EPA, to Air Docket A-96-40 re Analysis of Diesel Marine & Sterndrive/Inboard Gasoline Marine Inventory	2-5-97
II-B-05	11-25-98	M. Samulski, EPA, to Air Docket A-96-40 re Selection of Duty Cycle to Propose for High-Speed CI Marine Engines	2-19-97
II-B-06	12-8-98	A. Stout, EPA, to Air Docket re Cost Estimates for Marine Diesel Engine Emission Control Technology	12-2-98

Category II-C: EPA Correspondence to Persons Outside the Agency

<u>Document</u> <u>Number</u>	Date Rcvd in Docket	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
II-C-01		M. Samulski, EPA, to D. Kim, National Institute of Environmental Research, Korea, re EPA modeling of marine diesel engines	6-2-98

Category II-D: Correspondence Received from Persons Outside the Agency

<u>Document</u> <u>Number</u>	Date Rcvd in Docket	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
II-D-01	6-2-98	T. Ellis, Clean Cam Technology Systems, Bakersfield, CA	5-27-98
II-D-02	6-15-98	C. Marvin, private citizen, Butler, PA	6-12-98
II-D-03	6-16-98	A. Spackman, International Association of Drilling Contractors (IADC), Houston, TX	6-12-98
II-D-04	6-18-98	P. Shannon, private citizen, Dallas, TX	6-15-98
II-D-05	6-19-98	L. Stegink, Neal, Gerber & Eisenberg, on behalf of Engine Manufacturers Association (EMA), Chicago, IL	6-18-98
II-D-06	6-22-98	R. Lichtner, MerCruiser Sterndrives & Inboards, Stillwater, OK & S. Bucheger, Mercury Marine, Fond du Lac, WI	6-19-98
II-D-07	6-22-98	J. McKnight, National Marine Manufacturers Association, Washington, DC	6-22-98
II-D-08	6-22-98	J. Kelly, American Waterways Operators, Arlington, VA	6-22-98
II-D-09	6-22-98	R. Harkins, Lake Carriers' Association, Cleveland, OH	6-17-98

Category II-D: Correspondence Received from Persons Outside the Agency

<u>Date Rcvd</u> <u>in Docket</u>	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
6-22-98	K. Metcalf, Chamber of Shipping of America, Washington, DC	6-19-98
6-22-98	W. Perry, Volvo Penta of the Americas, Inc., Chesapeake, VA	6-18-98
6-22-98	R. Tickle, Department of the Navy, Washington, DC	6-22-98
7-27-98	D. Desai, Port of Corpus Christi, TX	6-22-98
10-9-98	E. Peterson, Santa Barbara County Air Pollution Control District, to M. Samulski, EPA, re emissions data from MerCruiser	4-1-98
10-9-98	G. Hellen, Wartsila NSD Corporation, presentation "Technologies for Diesel Exhaust Emission Reduction"	8-18-98
10-9-98	Bunker News Daily from 7-17-97	9-2-98
	6-22-98 6-22-98 7-27-98 10-9-98	in Docket Or Description, etc. 6-22-98 K. Metcalf, Chamber of Shipping of America, Washington, DC 6-22-98 W. Perry, Volvo Penta of the Americas, Inc., Chesapeake, VA 6-22-98 R. Tickle, Department of the Navy, Washington, DC 7-27-98 D. Desai, Port of Corpus Christi, TX 10-9-98 E. Peterson, Santa Barbara County Air Pollution Control District, to M. Samulski, EPA, re emissions data from MerCruiser 10-9-98 G. Hellen, Wartsila NSD Corporation, presentation "Technologies for Diesel Exhaust Emission Reduction" 10-9-98 Bunker News Daily from

Category II-E: EPA Memoranda of Meetings/Telephone Conversations with Outside Persons

<u>Document</u> <u>Number</u>	Date Rcvd in Docket	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
II-E-01	12-8-98	A. Stout, EPA, re meeting with Engine Manufacturers Association (EMA)	2-6-98
II-E-02	12-8-98	J. Revelt, EPA, re meeting with EMA/National Marine Manufacturers Association (NMMA)	5-29-98
II-E-03	12-8-98	J. Revelt, EPA, re 6-5-98 call with N. Weir, Yanmar	11-20-98
II-E-04	12-8-98	J. Revelt, EPA, re 6-4&5-98 calls with K. Metcalf, U.S. Chamber of Shipping	11-20-98
II-E-05	12-8-98	J. Revelt, EPA, re 6-9-98 meeting with A. Wright, Lloyd's Register	11-20-98
II-E-06	12-8-98	J. Revelt, EPA, re 6-12-98 conference call with engine marinizers	11-20-98
II-E-07	12-8-98	A. Stout, EPA, re 6-16-98 meeting with state organizations (NESCAUM, STAPPA, CARB)	11-20-98
II-E-08	12-8-98	A. Stout, EPA, re 6-18-98 call with R. Long, Earth Island Institute	11-20-98
II-E-09	12-8-98	J. Revelt, EPA, re 6-18-98 meeting with U.S. Chamber of Shipping/American Waterways Operators	11-20-98
II-E-10	12-8-98	A. Stout, EPA, re 7-1-98 field trip to Westerbeke	11-20-98

Category II-E: EPA Memoranda of Meetings/Telephone Conversations with Outside Persons

<u>Document</u> <u>Number</u>	Date Rcvd in Docket	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
II-E-11	12-8-98	J. Revelt, EPA, re 7-8-98 conference call with recreational boat builders/NMMA	11-20-98
II-E-12	12-8-98	A. Stout, EPA, re 7-9-98 conference call with Coalition for Clean Air	11-20-98
II-E-13	12-8-98	J. Revelt, EPA, re 7-98 site visit with marinizers/boat builders in Seattle, WA	11-20-98
II-E-14	12-8-98	J. Revelt, EPA, re 8-4-98 meeting with recreational boat builders/NMMA	11-20-98
II-E-15	12-8-98	J. Revelt, EPA, re 8-6-98 meeting with ABS Americas	11-20-98
II-E-16	12-8-98	J. Revelt, EPA, re 8-19-98 meeting with Caterpillar	11-20-98
II-E-17	12-8-98	J. Revelt, EPA, re 8-27-98 meeting with EMA	11-20-98
II-E-18	12-8-98	J. Revelt, EPA, re 9-14-98 meeting with EMA	11-20-98
II-E-19	12-8-98	J. Revelt, EPA, re 9-25-98 meeting with EMA	11-20-98
II-E-20	12-21-98	J. Revelt, EPA, re presentation materials/other pertinent data obtained at 8-18-98 Marine Engine Exhaust Emission Workshop (sponsored by NAVSEA)	12-18-98

Category II-E: EPA Memoranda of Meetings/Telephone Conversations with Outside Persons

<u>Document</u> <u>Number</u>	Date Rcvd in Docket	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
II-E-21	12-21-98	A. Stout, EPA, re presentation at International Workboat Show	12-18-98

Category II-F: Interagency Review Materials

<u>Document</u> <u>Number</u>	Date Rcvd in Docket	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
II-F-01	12-10-98	Final versions of NPRM, regulations & regulatory impact assessment as forwarded to OMB on 11-23-98	11-25-98
II-F-02	12-10-98	Draft NPRM, regulations & regulatory impact assessment as forwarded to OMB on 11-23-98	11-25-98
II-F-03	12-10-98	Draft NPRM, regulations & regulatory impact assessment as forwarded to OMB on 11-21-98	11-25-98
II-F-04	12-10-98	Draft NPRM, regulations & regulatory impact assessment as forwarded to OMB on 11-9-98	11-25-98
II-F-05	12-10-98	Draft NPRM, regulations & regulatory impact assessment with changes made between initial draft and final version as cleared by OMB	12-2-98
II-F-06	12-10-98	J. Revelt, EPA, to Air Docket re CI Marine NPRM National Security Exemption Language sent to OMB	12-4-98
II-F-07	12-21-98	J. Revelt, EPA, to Air Docket re CI Marine NPRM National Security Exemption Language sent to OMB	12-11-98
II-F-08	12-21-98	J. Revelt, EPA, to Air Docket re CI Marine NPRM Briefing for OMB	11-5-98

Category II-G: Comments Received After the Comment Period

<u>Document</u> <u>Number</u>	Date Rcvd in Docket	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
II-G-01	6-23-98	J. Ng, Westerbeke Corporation	6-19-98
II-G-02		See II-D-08	
II-G-03	6-26-98	M. Kenny, California Air Resources Board, Sacramento, CA	6-22-98
II-G-04	6-30-98	K. Levin, Seaworthy Systems, Inc., Orinda, CA	6-23-98
II-G-05	7-2-98	J. Grumet, Northeast States for Coordinated Air Use Management (NESCAUM), Boston, MA	6-22-98
II-G-06	7-20-98	R. Conanchey, ABS Americas, Houston, TX	7-10-98
II-G-07	7-24-98	C. Brady, General Electric International (GE), Inc., Cincinnati, OH	7-17-98
II-G-08	9-2-98	H. Mayer, Euromot, to J. Revelt, EPA	7-1-98
II-G-09	9-2-98	D. McElroy, Alaska Diesel Electric, to J. Revelt, EPA	6-19-98
II-G-10	9-9-98	J. Carmody, Santa Barbara County Air Pollution Control District (SBCAPCD), to M. Samulski, EPA, re Marine Engine Replacement Programs	7-21-97
II-G-11	9-9-98	J. Carmody, SBCAPCD, to M. Samulski, EPA, re Marine Engine Replacement Programs	12-1-97

Category II-G: Comments Received After the Comment Period

<u>Document</u> <u>Number</u>	Date Rcvd in Docket	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
II-G-12	12-10-98	Article, Diesel Progress, "Cat Gears Up Next Generation Fuel Systems"	8-98
II-G-13	12-10-98	Article, Diesel Progress, "The Year in Review: The Beat Goes On"	6-98
II-G-14	12-10-98	Article, Lloyd's Register, "Marine Exhaust Emissions Research Programme"	1995
II-G-15	12-10-98	Presentation "Technologies for Diesel Exhaust Emission Reduction" by G. Hellen, Wartsila NSD, at NAVSEA Workshop on Engine Exhaust Emission Regulation & Technology for Navy Vessels	8-18-98
II-G-16	12-10-98	J. Revelt, EPA, re report "Exhaust Gas Emission Measurements: A Contribution to a Realistic Approach," by D. Bastenhof, S.E.M.T.	12-4-98
II-G-17	12-21-98	European Commission Working Document Relating to Details of Amendments to Recreational Craft Directive 94/25/EC	9-25-98
II-G-18	12-24-98	K. Levin, Vice President, Pacific Merchant Shipping Association (PMSA), San Francisco, CA	12-17-98

Category II-J: References Not Readily Available to the Public Elsewhere

<u>Document</u> <u>Number</u>	Date Rcvd in Docket	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
II-J-01	11-12-98	Draft Proposal for Annex E (marine engines) & Annex F (locomotive engines) of ISO 8178-9	5-26-98

Subcategory III-A: Notice of Proposed Rulemaking

<u>Document</u> <u>Number</u>	Date Rcvd in Docket	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
III-A-01	12-21-98	NPRM Control of Emissions of Air Pollution from New CI Marine Engines At or Above 37 kW; Proposed Rule	12-11-98

Subcategory III-B: Proposed Support Document

<u>Document</u> <u>Number</u>	Date Rcvd in Docket	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
III-B-01	12-21-98	Draft Regulatory Impact Analysis: Control of Emissions from Compression- Ignition Marine Engines	11-98

Subcategory IV-A: EPA Studies or Contractor Reports

<u>Document</u> <u>Number</u>	Date Rcvd in Docket	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
IV-A-01		Final Report "Emission Testing of Nonroad Compression Ignition Engines," prepared for EPA by Carroll/Urban, contract #68-C4-0042	9-95

Subcategory IV-B: EPA Factual Memorandum

<u>Document</u> <u>Number</u>	Date Rcvd in Docket	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
IV-B-01		Supplemental Information Regarding Proposal for Control of Air Pollution from New CI Marine Engines at or Above 37 kW, A. Stout/J. Revelt, EPA	1-13-99

Subcategory IV-C: EPA Correspondence to Persons Outside the Agency

<u>Document</u> <u>Number</u>	Date Rcvd in Docket	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
IV-C-01		J. Revelt/M. Samulski, EPA, to W. Lundy, USCG re MARPOL Guidance for Continuous Emission Monitoring	2-24-99

Subcategory IV-D: Correspondence Received from Persons Outside the Agency

	1		
<u>Document</u> <u>Number</u>	<u>Date Rcvd</u> <u>in Docket</u>	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
IV-D-01	2-1-99	Working Document Relating to Details of Significant Amendments to Recreational Craft Directive 94-25-EC with Regard to Inclusing of Engine Exhaust & Sound Emission Requirements, European Commission	9-29-97
IV-D-02	2-19-99	G. Hellen, Wartsila NSD	1-13-99
IV-D-03	2-19-99	K. Metcalf, Chamber of Shipping of America	1-26-99
IV-D-04		W. Passie, Caterpillar, to J. Revelt, EPA, re interaction with American Bureau of Shipping	2-8-99
IV-D-05		Final Report "Shipboard Marine Engines Emission Testing for U.S. Coast Guard," prepared for Volpe National Transportation Systems Center & U.S. Coast Guard by Environmental Transportation Consultants	UNDATED
IV-D-06	2-18-99	R. Chretien, Cummins Wartsila	2-11-99

Subcategory IV-E: EPA Memoranda of Meetings/ Telephone Conversations with Outside Persons

<u>Document</u> <u>Number</u>	<u>Date Rcvd</u> <u>in Docket</u>	<u>Commentor</u> , <u>Addressee</u> , <u>Title</u> <u>or Description</u> , <u>etc.</u>	<u>Date of</u> <u>Document</u>
IV-E-01	2-19-99	J. Revelt, EPA, re 2-4-99 meeting with Lake Carriers' Association onboard Oglebay Norton	3-5-99
IV-E-02		J. Revelt, EPA, re 2-22-99 conference call with Alaska Diesel	3-5-99

Subcategory IV-F: Transcript & Testimony from Public Hearing

<u>Document</u> <u>Number</u>	Date Rcvd in Docket	Commentor, Addressee, Title or Description, etc.	<u>Date of</u> <u>Document</u>
IV-F-01		Hearing Transcript "Control of Emissions of Air Pollution from New CI Marine Engines"	1-19-9-98